

**FEE TRANSMITTAL FOR FY 2005**

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

TOTAL AMOUNT OF PAYMENT (\$) 500.00**Complete if Known:**

Application No. 10/052,699
Filing Date 1/17/02
First Named Inventor Paniconi
Examiner Name Rao, A.
Art Unit 2613
Attorney Docket No. 80398.P496

 Applicant claims small entity status. See 37 CFR 1.27.**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) Deposit AccountDeposit Account Number : 02-2666Deposit Account Name: ☒ The Director is Authorized to do the following with respect to the above-identified Deposit Account:☐ Charge fee(s) indicated below.☒ Charge any additional fee(s) or underpayment of fee(s) during the pendency of this application.☐ Charge fee(s) indicated below except for the filing fee☒ Credit any overpayments.☒ Any concurrent or future reply that requires a petition for extension of time should be treated as incorporating an appropriate petition for extension of time and all required fees should be charged.

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Provide credit card information and authorization on PTO-2038.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Large Entity | | Small Entity | | Fee Description | | Fees Paid (\$) |
|-----------------|----------|--------------|----------|------------------------------------|-----------|----------------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | | |
| 1011 | 300 | 2011 | 150 | Utility application filing fee | 1,000/500 | _____ |
| 1111 | 500 | 2111 | 250 | Utility search fee | | _____ |
| 1311 | 200 | 2311 | 100 | Utility examination fee | | _____ |
| 1012 | 200 | 2012 | 100 | Design application filing fee | 430/215 | _____ |
| 1112 | 100 | 2112 | 50 | Design search fee | | _____ |
| 1312 | 130 | 2312 | 65 | Design examination fee | | _____ |
| 1013 | 200 | 2013 | 100 | Plant filing fee | 660/330 | _____ |
| 1113 | 300 | 2113 | 150 | Plant search fee | | _____ |
| 1313 | 160 | 2313 | 80 | Plant examination fee | | _____ |
| 1004 | 300 | 2004 | 150 | Reissue filing fee | 1,400/700 | _____ |
| 1114 | 500 | 2114 | 250 | Reissue search fee | | _____ |
| 1314 | 600 | 2314 | 300 | Reissue examination fee | | _____ |
| 1005 | 200 | 2005 | 100 | Provisional application filing fee | | _____ |
| SUBTOTAL (1) \$ | | | | | | <u>0</u> |

2. EXCESS CLAIM FEES

| | <u>Extra Claims</u> | <u>Fee from below</u> | <u>Fees Paid (\$)</u> |
|---|---------------------|-----------------------|-----------------------|
| Total Claims _____ - 20 or HP = _____ HP = highest number of total claims paid for, if greater than 20 | | X _____ = _____ | |
| Independent Claims _____ - 3 or HP = _____ HP = highest number of independent claims paid for, if greater than 3 | | X _____ = _____ | |
| Multiple Dependent Claims | | _____ = _____ | |

| <u>Large Entity</u> | | <u>Small Entity</u> | | <u>Fee Description</u> |
|---------------------|----------|---------------------|----------|--|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1202 | 50 | 2202 | 25 | Each claim over 20 |
| 1201 | 200 | 2201 | 100 | Each independent claim over 3 |
| 1203 | 360 | 2203 | 180 | Multiple dependent claims, if not paid |
| 1204 | 200 | 2204 | 100 | Reissue: each claim over 20 and more than in the original patent |
| 1205 | 50 | 2205 | 25 | Reissue: each independent claim more than in the original patent |

SUBTOTAL (2) \$ 0**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| <u>Total Sheets</u> | <u>Extra Sheets</u> | <u>Number of each add'l 50 or fraction thereof</u> | <u>Fee from below</u> | <u>Fees paid (\$)</u> |
|---------------------|---------------------|--|-----------------------|-----------------------|
| _____ | - 100 = _____ | / 50 = _____ (round up to whole number) | X _____ | _____ |

| <u>Large Entity</u> | | <u>Small Entity</u> | | <u>Fee Description: Application size fee for each additional group of 50 sheets beyond initial 100 sheets (count spec & drawings except sequences & program listings):</u> |
|---------------------|----------|---------------------|----------|--|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1081 | 250 | 2081 | 125 | Utility |
| 1082 | 250 | 2082 | 125 | Design |
| 1083 | 250 | 2083 | 125 | Plant |
| 1084 | 250 | 2084 | 125 | Reissue |

SUBTOTAL (3) \$ 0

FEE CALCULATION (continued)**4. OTHER FEE(S)**

| | | | | Fees Paid (\$) | |
|---|----------|---------------------|----------|--|------------------|
| Non-English Specification, \$130 fee (no small entity discount) | | | | | |
| <u>Large Entity</u> | | <u>Small Entity</u> | | | |
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1813 | 8,800 | 1813 | 8,800 | Request for inter parties reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 120 | 2251 | 60 | Extension for reply within first month | |
| 1252 | 450 | 2252 | 225 | Extension for reply within second month | |
| 1253 | 1,020 | 2253 | 510 | Extension for reply within third month | |
| 1254 | 1,590 | 2254 | 795 | Extension for reply within fourth month | |
| 1255 | 2,160 | 2255 | 1,080 | Extension for reply within fifth month | |
| 1401 | 500 | 2401 | 250 | Notice of Appeal | |
| 1402 | 500 | 2402 | 250 | Filing a brief in support of an appeal | 500.00 |
| 1403 | 1,000 | 2403 | 500 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 500 | 2452 | 250 | Petition to revive - unavoidable | |
| 1453 | 1,500 | 2453 | 750 | Petition to revive - unintentional | |
| 1501 | 1,400 | 2501 | 700 | Utility issue fee (or reissue) | |
| 1502 | 800 | 2502 | 400 | Design issue fee | |
| 1503 | 1100 | 2503 | 550 | Plant issue fee | |
| 1462 | 400 | 1462 | 400 | Petitions to the Commissioner (CFR 1.17(f) Group I) | |
| 1463 | 200 | 1463 | 200 | Petitions to the Commissioner (CFR 1.17(g) Group II) | |
| 1464 | 130 | 1464 | 130 | Petitions to the Commissioner (CFR 1.17(h) Group III) | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 790 | 2809 | 395 | For filing a submission after final rejection (see 37 CFR 1.129(a)) | |
| 1814 | 130 | 2814 | 65 | Statutory Disclaimer | |
| 1810 | 790 | 2810 | 395 | For each additional invention to be examined (see 37 CFR 1.129(b)) | |
| 1801 | 790 | 2801 | 395 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |
| 1504 | 300 | 1504 | 300 | Publication fee for early, voluntary, or normal pub. | |
| 1505 | 300 | 1505 | 300 | Publication fee for republication | |
| 1803 | 130 | 1803 | 130 | Request for voluntary publication or republication | |
| 1808 | 130 | 1808 | 130 | Processing fee under 37 CFR 1.17(i) (except provisionals) | |
| 1454 | 1,370 | 1454 | 1,370 | Acceptance of unintentionally delayed claim for priority | |
| Other fee (specify) _____ | | | | | |
| Other fee (specify) _____ | | | | | |
| | | | | SUBTOTAL (4) | \$ 500.00 |

*Reduced by Basic Filing Fee Paid

SUBMITTED BY:Typed or Printed Name: Sheryl Sue HollowaySignature: Date: SEPT. 13, 2005Reg. Number: 37,850Telephone Number: 408-720-8300

Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Atty Docket No. 080398.P496

Patent

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

| | | |
|----------------------------|-------------|-----------------------|
| In re Application of: |) Examiner: | Rao, Anand Shashikant |
| |) | |
| Paniconi, et al. |) Art Unit: | 2613 |
| |) | |
| Application No. 10/052,699 |) | |
| |) | |
| Filed: January 17, 2002 |) | |
| |) | |
| For: MOTION SEGMENTATION |) | |
| SYSTEM WITH MULTI |) | |
| FRAME HYPOTHESIS |) | |
| TRACKING |) | |
| |) | |

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Group 2613, dated April 13, 2005, in which claims 1-21 in the above-identified application were finally rejected. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

I. REAL PARTY IN INTEREST

The real party in interest are the joint assignees of the full interest in the invention, Sony Corporation of Park Ridge, NJ, and Sony Electronics, Inc. of San Jose, CA

09/16/2005 RFEKADU1 00000003 10052699

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500.00 0P

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

III. STATUS OF THE CLAIMS

Claims 1-21 are pending in the application and were rejected in a final Office Action mailed April 13, 2005. Claims 1-21 are the subject of this appeal. A copy of Claims 1-21 as they stand on appeal are set forth in Appendix A.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been made after receipt of the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellant's invention as claimed in claims 1-21 identifies motion classes for regions within a frame of video and tracks the regions through the next frame based on a code vector associated with the class [Specification: ¶¶ 17-18 and Figures 1A-B]. However, a region may be improperly classified if it was partially occluded in the initial frame, which causes the encoded video to be decoded incorrectly. Therefore, Appellant performs an analysis on the regions to determine if a region is improperly, i.e., poorly, classified [¶¶29-33 and Figure 2]. Poorly classified regions are reclassified [§§37-41 and Figure 3]. In one embodiment, the reclassification is based on similarity measures using specifically defined equations.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 1-21 stand rejected under 35 U.S.C. § 102(e) over U.S. Patent 6,643,387 to Sethuraman et al.

VII. ARGUMENTS

I. Claims 1-21 are Patentable under 35 U.S.C. § 102(e) over Sethuraman.

A. Claims 1-7 and 9-21

Claims 1-7 and 9-21 stand or fall together. Claim 1 is the representative claim. Claim 1 claims the reclassification of a poorly classified region of video. Claim 1 further defines a poorly classified region to be a region classified as belonging to an improper class.

Sethuraman discloses identifying key objects in frames of video and classifying the motion information of the key objects into certain categories of actions, such as human, vehicular, or random actions. Sethuraman also discloses that objects too small to track are not labeled as key objects, and thus the motion information of such small objects is not classified.

The Examiner has interpreted the untrackable small objects in Sethuraman as being poorly classified in order to assert that Sethuraman anticipates Appellant's claim 1. However, Sethuraman contains no teaching or suggestion that Sethuraman deems the untrackable small objects are being improperly classified. Thus, Sethuraman does not support the Examiner's interpretation.

Furthermore, the Examiner asserts that Sethuraman discloses the reclassification of poorly classified regions as claimed by Appellant, citing column 9, lines 50-67 of Sethuraman as supporting his interpretation:

Given that two or more sub-regions belong to the same key object, their trajectories can be used to identify the action performed by that key object. Specifically, if further context on a key-object and its sub-regions is provided through manual means or through analysis of their shape, color, texture, and the like, then conditioned upon this knowledge, a contextual relationship between the sub-regions can be developed. Thus, by analyzing the sub-region motion trajectories, specific actions performed by the key object can be deduced. For example, if it turns out that the key object is a person (e.g., through skin-tone detection and shape) and the sub-regions correspond to the limbs of this person, then from the trajectory of the different joints in the limbs, specific motions such as run, walk, lift, etc. (see below for a detailed list of actions) can be identified.
[Sethuraman:]

In fact, Sethuraman teaches that the motion of only key objects are classified into certain categories of actions. Thus, Sethuraman does not teach or suggest that the actions of an untrackable small object are reclassified as asserted by the Examiner. Therefore, Sethuraman cannot be properly interpreted as teaching or suggesting Appellant's claimed reclassification of poorly classified regions.

B. Claim 8

In claim 8, Appellant claims a particular equation used to reclassify a poorly classified region of video. Sethuraman does not teach or suggest the equation as claimed. Thus, Sethuraman cannot be properly interpreted as disclosing Appellant's claimed equation used to reclassify a region of video.

VIII. CONCLUSION

Because Sethuraman does not teach each and every limitation of Appellant's invention as claimed in claims 1-21, Sethuraman cannot be properly interpreted as anticipating Appellant's invention as claimed. Accordingly, Appellant respectfully requests the Board reverse the rejections of claims 1-21 under 35 U.S.C. § 102(e) and direct the Examiner to enter a Notice of Allowance for claims 1-21.

Fee for Filing a Brief in Support of Appeal

Enclosed is a check in the amount of \$500.00 to cover the fee for filing a brief in support of an appeal as required under 37 C.F.R. §§ 1.17(c) and 41.37(a).

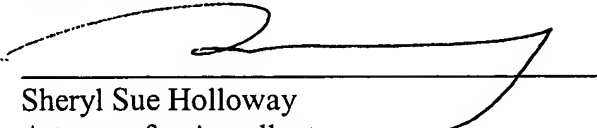
Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Appellant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR
& ZAFMAN LLP

Dated: September 13, 2005



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Registration No. 37,850

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